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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,995	01/18/2002	Norbert Becker	3286-0168P	7874

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ART UNIT	PAPER NUMBER
2162	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)
Office Action Summary		09/914,995	BECKER ET AL.
		Examiner	Art Unit	
		Anh Ly	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 August 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is response to Applicants' AMENDMENT filed on 08/22/2006.

2.   Claims 1-27 are pending in this application.

Drawings

3.   The drawing was received on 08/22/2006. This drawing is acceptable.

Response to Arguments

4.   Applicant's arguments filed 08/22/2006 have been fully considered but they are

not persuasive.

Applicants argued that, "Neither Gloudeman nor Fraley deal with automatic

retrieval of engineering data from an automation system." (page 18, 2nd paragraph).

In response to applicant's arguments, the recitation "automatic retrieval of

engineering data from an automation system" has not been given patentable weight

because the recitation occurs in the preamble. A preamble is generally not accorded

any patentable weight where it merely recites the purpose of a process or the intended

use of a structure, and where the body of the claim does not depend on the preamble

for completeness but, instead, the process steps or structural limitations are able to

stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v.

Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicants argued that, "Gloudeman fails to teach or suggest, "supplying, via the

objects ... to the engineering system."" (page 16, lines 18-20).

Gloudeman teaches standard objects and assembly objects and application

objects are identified and these objects are represented the main type of objects in the

automation system (col. 7, lines 18-28), Also, each object in the system is identified by the key object (col. 19, lines 38-45). Gloudeman teaches constructing building automation applications, which are providing a computer software architecture supporting object-oriented software system as well as application for engineering for creating sets of applications for each device environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to designated intermediate storage device (col. 27, lines 8-14), and objects in the system are referenced as indexes via slot indexes.

Applicants argued that, "Fraley does not teach "entering a reference to the object."" (page 18, lines 2-3).

Fraley teaches creating and manipulating objects and modifying the property of these object through a public object interface and the objects are provided via input devices to the computer system and objects are access by using object services and each object has its own pointer or referencing representative to the object (col. 2, lines 17-28 and col. 3, lines 12-18; also col. 1, lines 15-30 and col. 6, lines 15-62; also see col. 5, lines 32-52, col. 6, lines 15-67 and col. 7, lines 1-12).

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-27 are rejected under 35 U.S.C. 101. Because the bodies of claims 1, 8, 26 and 27 in view of MPEP 2100 (IV)(B)(2)(b)(ii) sections are non statutory because they are **lacking of real world useful result**. They are missing the steps or processes

producing any useful result to the invention, of having a utility to convey the final result

achieved by the claimed invention, that is, they are not producing a result tied to the

real/physical world or this application is not a practical application. That is, these claims

are missing "utility requirement" of 35 U.S.C. 101 (MPEP 2107.01), these claims must

show that the claimed invention is "useful" for some purpose either explicitly or implicitly

(Fisher, 421, F.3d 1356, 76 USPQ2d at 1230 and 1225 (Fed. Cir. 2005). That is, these

claims are missing "**utility requirement**" of 35 U.S.C. 101 (MPEP 2107.01), these

claims must show that the claimed invention is "useful" for some purpose either

explicitly or implicitly (Fisher, 421, F.3d 1356, 76 USPQ2d at 1230 and 1225 (Fed. Cir.

2005). In addition, when the examiner has reason to believe that the claim is not for a

practical application that produces a useful result, the claim should be rejected, thus

requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial

exceptions to patentable subject matter by specifically reciting in the claim the practical

application. In such cases, statements in the specification describing a practical

application may not be sufficient to satisfy the requirements for section 101 with respect

to the claimed invention. Likewise, a claim that can be read so broadly as to include

statutory and nonstatutory subject matter must be amended to limit the claim to a

practical application. In other words, if the specification discloses a practical application

of a section 101 judicial exception, but the claim is broader than the disclosure such that

it does not require a practical application, then the claim must be rejected.

More specifically, the claimed subject matter provides for **"having, based upon

the reference, each representative read out engineering information from the**

object into the representative" and **"the reference is provided for the reading out**

of engineering information from the object into a respective representative by

each representative". These produced result remains in the abstract and, thus, fails to

achieve the required status of having real world value.

The "system" in claims 8-14, 20-24 and 27 is not well-defined in the application

specification, so it is as software per se, a non-statutory subject matter.

The claims lack the necessary physical articles or objects to constitute a machine
or a manufacture within the meaning of 35 USC 101. They are clearly not a series of
steps or act to be a process nor are they a combination of chemical compounds to be a
composition of matter. As such, they fail to fall within a statutory category. They are, at
best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive
material" or "nonfunctional descriptive material." Both types of "descriptive material" are
nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d
at 1759. When functional descriptive material is recorded on some computer-readable
medium, it becomes structurally and functionally interrelated to the medium and will be
statutory in most cases since use of technology permits the function of the descriptive
material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d
1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on
a computer-readable medium, in a computer, or on an electromagnetic carrier signal,
does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that
the claims for an algorithm in *Benson* were unpatentable as abstract ideas because
"[t]he sole practical application of the algorithm was in connection with the programming
of a general purpose computer.").

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 1, 8, 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as

being incomplete for omitting essential steps, such omission amounting to a gap

between the steps. See MPEP § 2172.01. The omitted steps are: automation step(s)

or processes for objects in an engineering system as set forth in the preamble of the

claim, however, the body of claims do not appear to actually support the preamble by

including a step or steps which accomplish that act.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

Patent No. 6,119,125 issued to Gloudeman et al. (hereinafter Gloudeman) in view of

Patent No.: US 6,059,838 issued to Fraley et al. (hereinafter Fraley).

With respect to claim 1, Gloudeman teaches a method for automatic retrieval of

engineering data from an automation system with a multiplicity of individual automation

objects for the restoration of representatives in an engineering system of objects of the

automation system (a computer-implemented building automation system provides a

computer software that support object oriented system development and the standard

objects are interconnected by pulling and pushing information from one to anther:

abstract, col. 1, lines 40-60), comprising:

supplying, via the objects, an identifying designation of a type of respective

representative to the system (each object in the system is identified by an access key

object: col. 19, lines 38-45); and

having, based upon the reference, each representative read out engineering

information from the object (the objects are read out by using Read and Signup method:

col. 6, lines 55-65).

Gloudeman teaches constructing building automation applications, which are

providing a computer software architecture supporting object-oriented software system

as well as application for engineering for creating sets of applications for each device

environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to

designated intermediate storage device (col. 27, lines 8-14), and objects in the system

are referenced as indexes via slot indexes. Gloudeman does not clearly teach an

engineering system and creating, via the system, corresponding representatives for the

designated types and, for each of the representatives, entering a reference to the

object.

However, Fraley teaches creating and manipulating objects and modifying the

property of these object through a public object interface (col. 2, lines 17-28 and col. 3,

lines 12-18; also col. 1, lines 15-30 and col. 6, lines 15-62).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Gloudeman with the

teachings of Fraley. One having ordinary skill in the art would have found it motivated to

utilize the use of the object-oriented programming objects to creating the object through

a public object interface (Fraley's col. 1, lines 15-30), into the system of Gloudeman for

the purpose of automatically reading out/retrieving objects in the computer implemented

automation object system for software systems as an engineering system (Fraley's col.

2, lines 18-65 and col. 6, lines 15-62).

With respect to claim 2, Gloudeman teaches a method for automatic retrieval of

engineering data as discussed in claim 1. Also Gloudeman teaches supplying, for

devices on which the automation objects run, an identifying designation of a type of

respective device representative to the system, creating, via the system, corresponding

device representatives for the designated types and having, based upon the reference,

each device representative read out engineering information from the device and,

wherein, in a second step for the restoration of representatives of the automation

objects in the engineering system, the method further comprises, supplying, via the

automation objects, an identifying designation of a type of respective representative to

the engineering system, creating, via the engineering system, Corresponding

representatives for the designated types, and having, based upon the reference, each

representative read out engineering information from the automation object (each object

in the system is identified by an access key object: col. 19, lines 38-45; and building an

automation system containing objects: col. 1, lines 40-58; and the objects are read out

by using Read and Signup method: col. 6, lines 55-65).

Gloudeman teaches constructing building automation applications, which are

providing a computer software architecture supporting object-oriented software system

as well as application for engineering for creating sets of applications for each device

environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to

designated intermediate storage device (col. 27, lines 8-14), and objects in the system

are referenced as indexes via slot indexes. Gloudeman does not clearly teach an

engineering system.

However, Fraley teaches creating and manipulating objects and modifying the

property of these object through a public object interface (col. 2, lines 17-28 and col. 3,

lines 12-18; also col. 1, lines 15-30 and col. 6, lines 15-62).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to combine the teachings of Gloudeman with the

teachings of Fraley. One having ordinary skill in the art would have found it motivated to

utilize the use of the object-oriented programming objects to creating the object through

a public object interface (Fraley's col. 1, lines 15-30), into the system of Gloudeman for

the purpose of automatically reading out/retrieving objects in the computer implemented

automation object system for software systems as an engineering system (Fraley's col.

2, lines 18-65 and col. 6, lines 15-62).

With respect to claim 3, Gloudeman discloses supplying, via the devices, lists

with communication relationships to the engineering system (col. 4, lines 31-67); and

converting, in the engineering system, entries of the lists into references to inputs

and outputs of the representatives of the automation objects and, subsequently, setting

up corresponding connections up in the engineering system (col. 9, lines 25-42 and col.

12, lines 44-52).

With respect to claim 4, Gloudeman discloses wherein both the objects of the

engineering system and the objects of the automation system are described by a

uniform, executable object model and a direct communication at model level is possible

between the objects of the engineering system and the objects of the automation

system (col. 3, lines 38-67, col. 4, lines 1-10, col. 6, lines 12-46 and col. 7, lines 54-62;

also see fig. 2; level of object model).

With respect to claim 5, Gloudeman discloses wherein entries in the lists with

communication relationships contain sources and drains of the communication

relationships, the sources and drains in each case being described by a triple from an

identifier of the device, an identifier of the automation object and an identifier of the

input or output (col. 9, lines 4-42).

With respect to claim 6, Gloudeman discloses wherein the objects of the automation system have no direct reference to the associated objects of the engineering system, to make it possible for the engineering system and automation system to be separated (col. 22, lines 55-67 and col. 23, lines 1-10).

With respect to claim 7, Gloudeman discloses wherein, the method is used for the updating of already existing engineering information as a delta method. (col. 17, lines 55-67 and col. 18, lines 1-32; also col. 27, lines 4-14).

Claim 8 is essentially the same as claim 1 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 9 is essentially the same as claim 2 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 10 is essentially the same as claim 3 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 11 is essentially the same as claim 4 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 12 is essentially the same as claim 5 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 13 is essentially the same as claim 6 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 14 is essentially the same as claim 7 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claims 15-16, Gloudeman discloses wherein both the objects of the engineering system and the objects of the automation system are described by a uniform, executable object model and a direct communication at model level is possible between the objects of the engineering system and the objects of the automation system (col. 3, lines 38-67, col. 4, lines 1-10, col. 6, lines 12-46 and col. 7, lines 54-62; also see fig. 2; level of object model).

With respect to claims 17-19, Gloudeman discloses wherein entries in the lists with communication relationships contain sources and drains of the communication relationships, the sources and drains in each case being described by a triple from an identifier of the device, an of the automation object and an identifier of the input or output (col. 9, lines 4-42).

Claims 20-21 are essentially the same as claims 15-16 except that they are directed to a system rather than a method, and are rejected for the same reason as applied to the claims 15-16 hereinabove.

Claims 22-24 are essentially the same as claims 17-19 except that they are directed to a system rather than a method, and are rejected for the same reason as applied to the claims 17-19 hereinabove.

With respect to claim 25, Gloudeman teaches wherein the first step for the restoration of device representatives in the engineering system is initiated from a software system (col. 2, lines 28-42 and col. 3, lines 4-16).

With respect to claim 26, Gloudeman teaches supplying, via the runtime automation objects, identifiers each identifying a type of respective representative, corresponding to one of the runtime automation objects, to the system (each object in the system is identified by an access key object: col. 19, lines 38-45);

entering a reference to the corresponding runtime automation object (col. 11, lines 22-40 and col. 21, lines 12-30; and col. 25, lines 1-36); and

having, each engineering representative read out engineering data from the corresponding runtime automation object (the objects are read out by using Read and Signup method: col. 6, lines 55-65).

Gloudeman teaches discloses constructing building automation applications, which are providing a computer software architecture supporting object-oriented software system as well as application for engineering for creating sets of applications for each device environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to designated intermediate storage device (col. 27, lines 8-14), and objects in the system are referenced as indexes via slot indexes. Gloudeman does not clearly teach an engineering system and creating, via the system, for each of the types, a

corresponding engineering representative and entering a reference to the corresponding runtime automation object in each of the representatives.

However, Fraley teaches creating and manipulating objects and modifying the property of these object through a public object interface (col. 2, lines 17-28 and col. 3, lines 12-18; also col. 1, lines 15-30 and col. 6, lines 15-62).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Gloudeman with the teachings of Fraley. One having ordinary skill in the art would have found it motivated to utilize the use of the object-oriented programming objects to creating the object through a public object interface (Fraley's col. 1, lines 15-30), into the system of Gloudeman for the purpose of automatically reading out/retrieving objects in the computer implemented automation object system for software systems as an engineering system (Fraley's col. 2, lines 18-65 and col. 6, lines 15-62).

Claim 27 is essentially the same as claim 26 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 26 hereinabove.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Contact Information

9.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or
via E-Mail: ANH.LY@USPTO.GOV **(Written Authorization being given by
Applicant (MPEP 502.03 [R-2])) or fax to (571) 273-4039 (Examiner's
personal Fax No.).** The examiner can normally be reached on TUESDAY –
THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone
are unsuccessful, the examiner's supervisor, **John Breene**, can be reached on (571)
272-4107.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for published
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have questions on access to the Private PAIR system, contact the Electronic Business
Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed
to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to:
Central Fax Center: (571) 273-8300

ANH LY
NOV. 1st, 2006

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